

1       What is claimed is:

2       1.    A    system    for    configuring    networks,  
3    comprising:

4       at least one network element database, the at  
5    least one network element database abstracting  
6    interface data regarding at least one network  
7    element; and

8       a processor, communicating with the at least one  
9    network element database, the processor operable to  
10   configure a network using the at least one network  
11   element database.

12       2.   The system of claim 1, wherein the at least  
13   one network element database comprises a set of data  
14   corresponding to network elements.

15       3.   The system of claim 2, wherein the set of  
16   data corresponding to network elements comprises data  
17   corresponding to at least one of routing elements,  
18   switching elements, optical elements, and wireless  
19   elements.

20       4.   The system of claim 3, wherein the set of  
21   data corresponding to network elements is extensible.

22       5.   The system of claim 1, wherein the  
23   processor comprises a user interface.

24       6.   The system of claim 5, wherein the user  
25   interface comprises object oriented code.

26       7.   The system of claim 6, wherein the user  
27   interface comprises at least one of a network element  
28   list and a network map.

29       8.   The system of claim 1, further comprising a  
30   network port, the processor communicating via the  
31   network port with a network to be configured.

1       9. The system of claim 1, wherein the  
2 interface data comprises at least one of software  
3 interface requirements, hardware interface  
4 requirements, and protocol specifications.

5       10. The system of claim 1, wherein the  
6 processor stores an image of a network for  
7 modification.

8       11. A method for configuring networks,  
9 comprising:

10       a) abstracting interface data regarding at  
11 least one network element in at least one network  
12 element database; and

13       b) configuring a network via communication  
14 with the at least one network element database.

15       12. The method of claim 11, wherein the at  
16 least one network element database comprises a set of  
17 data corresponding to network elements.

18       13. The method of claim 12, wherein the set of  
19 data corresponding to network elements comprises data  
20 corresponding to at least one of routing elements,  
21 switching elements, optical elements, and wireless  
22 elements.

23       14. The method of claim 13, wherein the set of  
24 data corresponding to network elements is extensible.

25       15. The method of claim 11, wherein the  
26 processor comprises a user interface.

27       16. The method of claim 15, wherein the user  
28 interface comprises object oriented code.

29       17. The method of claim 16, wherein the user  
30 interface comprises at least one of a network element  
31 list and a network map.

1       18. The method of claim 11, further comprising  
2 a step of c) communicating via a network port with a  
3 network to be configured.

4       19. The method of claim 11, wherein the  
5 interface data comprises at least one of software  
6 interface requirements, hardware interface  
7 requirements, and protocol specifications.

8       20. The method of claim 11, further comprising  
9 a step of d) storing an image of a network for  
10 modification.

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